

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1 (currently amended) A three-dimensional image optical system comprising an elementary image optical subsystem that includes plural afocal optical elements placed in a planar array to form an elementary image optical subsystem,

wherein each of said afocal optical ~~element~~ elements has a first optical component and a second optical component both aligned ~~in-such~~ at a distance such that an optical convergence area of said first optical component and an optical convergence area of said second optical component spatially coincide, and

wherein said first and second optical components are surrounded and held by an optical gobo element.

Claim 2 (currently amended) A three-dimensional image optical system according to claim 1,

wherein said first optical component and said second optical component are both aligned ~~in-such~~ at a distance such that said first optical component and said second optical component are aligned in a common optical axis in which optical focal points of said first optical component

and said second optical component coincide.

Claim 3 (original) A three-dimensional image optical system according to claim 2, wherein a focal length of said first optical component and a focal length of said second optical component are different.

Claim 4 (original) A three-dimensional image optical system according to claim 2, wherein said first optical component has a convergent focal length and said second optical component has a virtual focal length.

Claim 5 (original) A three-dimensional image optical system according to claim 1, wherein at least one of said first optical component and said second optical component is a radial graded refractive index rod lens.

Claim 6 (original) A three-dimensional image optical system according to claim 5, wherein optical length  $Z_u$  of said first optical component is in a range of  $0 < Z_u < P/2$  and different from optical length  $Z_u$  of said second optical component which is in a range of  $0 < Z_u < P/2$  where a normalized meridional serpentine period  $P = 2\pi/A^{1/2}$  is defined by optical property parameter  $A$  of said first and second optical components.

Claim 7 (original) A three-dimensional image optical system according to claim 5,  
wherein optical length  $Z_u$  of said first optical component is in a range of  $0 < Z_u < P/2$  and  
optical length  $Z_u$  of said second optical component is in a range of  $P/2 < Z_u < P$  where a normalized  
meridional serpentine period  $P = 2\pi/A^{1/2}$  is defined by optical property parameter A of said first  
and second optical components.

Claim 8 (canceled).

Claim 9 (original) A three-dimensional image optical system according to claim 2,  
wherein said first optical component and said second optical component are both held  
with an optical gobo element.

Claim 10 (original) A three-dimensional image optical system according to claim 5,  
wherein said first optical component and said second optical component are both held  
with an optical gobo element.

Claim 11 (original) A three-dimensional image optical system according to claim 1,  
wherein even quantity of said elementary image optical subsystems, which are placed in a  
series with distances so that an image reproduced by a foreside elementary image optical  
subsystem locates before a subsequent elementary image optical subsystem, are employed.

Claim 12 (original) A three-dimensional image optical system according to claim 2,  
wherein even quantity of said elementary image optical subsystems, which are placed in a  
series with distances so that an image reproduced by a foreside elementary image optical  
subsystem locates before a subsequent elementary image optical subsystem, are employed.

Claim 13 (original) A three-dimensional image optical system according to claim 5,  
wherein even quantity of said elementary image optical subsystems, which are placed in a  
series with distances so that an image reproduced by a foreside elementary image optical  
subsystem locates before a subsequent elementary image optical subsystem, are employed.